EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	136	(janssens sommen de ADJ boeck deboeck leenaerts van roosbroeck diels).in. and piperazine.ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/10 14:17
L2	80	l1 and derivative$.ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/10 14:18

=> b reg
FILE 'REGISTRY' ENTERED AT 13:53:54 ON 10 AUG 2007
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 9 AUG 2007 HIGHEST RN 944380-35-2
DICTIONARY FILE UPDATES: 9 AUG 2007 HIGHEST RN 944380-35-2

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experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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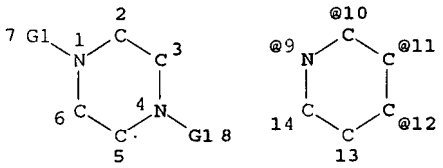
L5 STR



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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 23449 ITERATIONS 314 ANSWERS
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FILE 'HCAPLUS' ENTERED AT 13:54:01 ON 10 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 10 Aug 2007 VOL 147 ISS 8
FILE LAST UPDATED: 9 Aug 2007 (20070809/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitrn fhitstr l18 tot

L18 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:1124611 HCAPLUS
DN 142:74608
TI A preparation of 1,4-di-(piperidin-4-yl)piperazine derivatives, useful as NK1 antagonists
IN **Janssens, Frans Eduard**; **Sommen, Francois Maria**; De Boeck, Benoit Christian Albert Ghislain; **Leenaerts, Joseph Elisabeth**; **Van Roosbroeck, Yves Emiel Maria**; Meert, Theo Frans
PA **Janssen** Pharmaceutica N. V., Belg.
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2004110415	A2	20041223	2004WO-EP51048	20040607
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	JP2006527236	T	20061130	2006JP-0516137	20040607
	MX2005PA13295	A	20060309	2005MX-PA13295	20051207
	US2006128721	A1	20060615	2005US-0560476	20051212
PRAI	WO 2003-EP350220	A	20030610		
	2004WO-EP51048	W	20040607		

OS MARPAT 142:74608
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of 1,4-di-(piperidin-4-yl)-piperazine derivs. of formula I [wherein: Q is O, NH, or N-alkyl; X is (CH2)0-2; Y is (CH2)1-2; Z is (CH2)1-2; E is a bond or O, S, NH, N-alkyl; each A represents independently from each other, a bond or (un)substituted (cyclo)alkyl; D is a bond, C(O), or SO2; L is H, alkoxy, aryloxy, alkylamino, or heterocyclyl-carbonyl, etc.; each R1, independently from each other, is selected from aryl, arylalkyl, or diarylalkyl; R2 is alkyl, aryl, arylalkyl, or heterocyclylalkyl, etc.], useful as NK1 receptor antagonists. The pharmaceutical composition according to the invention reduces to a large extent a number of unwanted side-effects associated with opioid analgesics, in particular emesis, respiratory depression and tolerance, thereby increasing the total tolerability of said opioids in pain treatment. For instance, 1,4-di-(piperidin-4-yl)piperazinecarboxothiophene derivative II (h-NK1, pIC50 = 10; h-NK2, pIC50 = 6.1; h-NK3, pIC50 = 6.3) was prepared via amidation of 3-thiophenecarboxylic acid by 1,4-di-(piperidin-4-yl)piperazine derivative III with a yield of 58%.

IT **681290-29-9P 681290-30-2P 681290-57-3P**

681291-02-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

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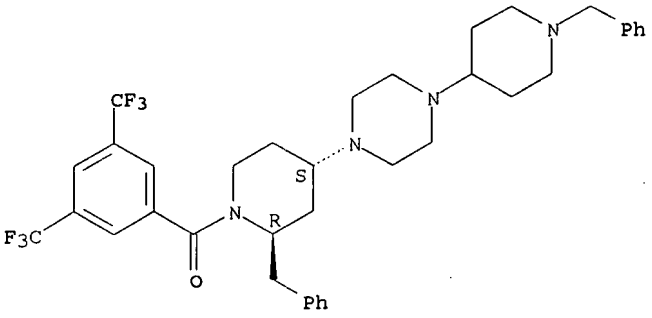
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

IT 681291-93-0P 681291-95-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

IT 681290-29-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1

antagonists)
RN 681290-29-9 HCAPLUS
CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-4-piperidinyl]-1-piperazinyl]-, (2R,4S)- (9CI) (CA INDEX NAME)

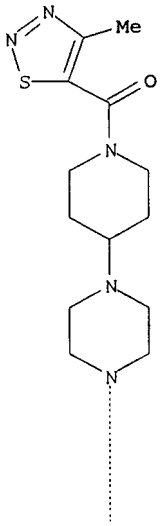
Absolute stereochemistry.



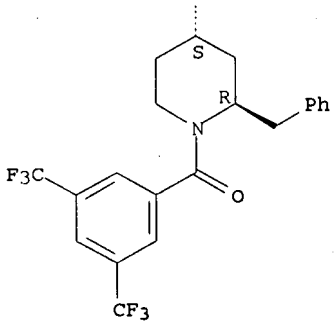
L18 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:760314 HCAPLUS
DN 141:384410
TI A screening strategy for the development of enantiomeric separation methods in capillary electrophoresis
AU Jimidar, M. Ilias; van Ael, Willy; van Nyen, Patrick; Peeters, Margot; Redlich, Dirk; de Smet, Maurits
CS Pharmaceutical Research & Development (J&J-PRD) A division of **Janssen** Pharmaceutica n.v., Global Analytical Development, Johnson and Johnson, Beerse, Belg.
SO Electrophoresis (2004), 25(16), 2772-2785
CODEN: ELCTDN; ISSN: 0173-0835
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB Method development of enantiomeric sepns. in capillary electrophoresis (CE) is a time-consuming task, since finding the appropriate chiral selector is usually a "trial and error" process. It is impossible to predict the selectivity of a selector towards a certain enantiomer. Therefore, the affinity of all selectors has to be examined one at a time. In order to speed up this process, a strategy is proposed based on simple exptl. design methodol. The approach includes first a screening in function of the pH to determine the optimal migration conditions followed by a selection of the right chiral selector by means of Taguchi designs. In the approach several variables, such as the type and concentration of cyclodextrin, the concentration of buffer electrolyte, and the percentage of organic modifier, are varied simultaneously to find initial separation conditions rapidly. The resulting initial separation conditions can be optimized in further steps to be more reproducible. We discuss the results of the approach when applied on a number of selected compds. that are recently in development at Johnson & Johnson - Pharmaceutical Research and Development. Parameters, such as quality of the separation and anal. time, are evaluated to determine initial separation conditions for each compound
IT **783370-61-6 783370-62-7**
RL: ANT (Analyte); ANST (Analytical study)
(screening strategy for development of enantiomeric separation methods in capillary electrophoresis)
IT **783370-61-6**
RL: ANT (Analyte); ANST (Analytical study)
(screening strategy for development of enantiomeric separation methods in capillary electrophoresis)
RN 783370-61-6 HCAPLUS
CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-4-[4-[1-[(4-methyl-1,2,3-thiadiazol-5-yl)carbonyl]-4-piperidinyl]-1-piperazinyl]-2-(phenylmethyl)-, (2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:550876 HCAPLUS
DN 141:106495
TI Substituted 1-piperidin-3-yl-4-piperidin-4-yl-piperazine derivatives and their use as neurokinin antagonists
IN **Janssens, Frans Eduard**; **Sommen, Francois Maria**; De Boeck, Benoit Christian Albert Ghislain; **Leenaerts, Joseph Elisabeth**
PA **Janssen** Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO2004056364	A1	20040708	2003WO-EP51035	20031217

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,

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	AU2003300578	A1	20040714	2003AU-0300578	20031217
	EP---1578425	A1	20050928	2003EP-0813610	20031217
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	IN2005DN02711	A	20070105	2005IN-DN02711	20050620
	US2006252747	A1	20061109	2005US-0540045	20050622
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	NO2005003598	A	20050920	2005NO-0003598	20050722
PRAI	2002WO-EP14835	A	20021223		
	2003EP-0813610	A	20031217		
	2003WO-EP51035	W	20031217		
OS	MARPAT 141:106495				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = Ar2, Ar2-alkyl, di(Ar2)-alkyl Het1, Het1-alkyl; R3 independently = H or alkyl; Y = covalent bond, -CO-, -SO2-, >C:CHR or >C:NR, wherein R = H, CN or NO2; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from pyrrolyl, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts having neurokinin antagonistic activity, in particular NK1 antagonistic activity, a combined NK1/NK3 antagonistic activity and a combined NK1/NK2/NK3 antagonistic activity, their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of schizophrenia, emesis, anxiety and depression, irritable bowel syndrome (IBS), circadian rhythm disturbances, visceral pain, neurogenic inflammation, asthma, micturition disorders such as urinary incontinence and nociception are disclosed. Thus, e.g., II was prepared via reaction of (2R-trans)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl)piperidine (preparation given) with 1-(phenylmethyl)-3-piperidinone. The receptor binding values (pIC50) for the h-NK1 ranges for all compds. according to the invention between 10 and 6. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P, Neurokinin A and Neurokinin B by blocking the NK1, NK2 and NK3 receptors, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular schizoaffective disorders, depression, anxiety disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

IT **720713-39-3P 720713-40-6P 720713-41-7P**
720713-58-6P 720713-60-0P 720713-71-3P
720714-87-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)

IT **720713-42-8P 720713-44-0P 720713-45-1P**

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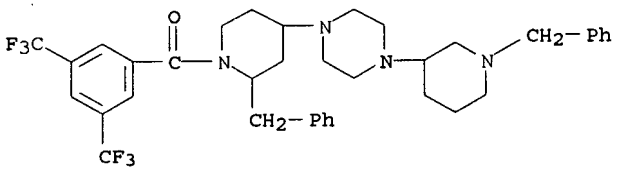
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)

IT 720713-39-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)

RN 720713-39-3 HCAPLUS

CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-3-piperidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:546478 HCAPLUS

DN 141:89116

TI Preparation of substituted 1,4-di-piperidin-4-yl-piperazine derivatives and their use as tachykinin antagonists

IN **Janssens, Frans Eduard**; **Sommen, Francois Maria**; De Boeck, Benoit Christian Albert Ghislain; **Leenaerts, Joseph Elisabeth**; **Van Roosbroeck, Yves Emiel Maria**

PA **Janssen** Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2004056772	A1	20040708	2002WO-EP14836	20021223 <--
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	2003WO-EP50697	W	20031007	<--	
OS	MARPAT 141:89116				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Tile compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = alkyl, Ar2, Ar2-alkyl, Het1, Het1-alkyl; R3 independently = H or alkyl; Y = covalent bond, CO, SO2; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from pyrrolyl, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts are disclosed as having tachykinin antagonistic activity, in particular NK1 antagonistic activity. Their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of emesis, anxiety, depression and irritable bowel syndrome (IBS) are disclosed. Thus, II was prepared via resolution of III (preparation given), de-N-benzylation, and reaction with 1-(phenylmethyl)-4-piperidinone. Selected compds. of the invention were evaluated for binding to h-NK1, h-NK2, and h-NK3 receptors with all compds. showing (sub)nanomolar affinity for h-NK1 with most possessing more than 100-fold selectivity towards the h-NK2 and h-NK3 receptors. In view of their capability to antagonize the actions of tachykinins by blocking the tachykinin receptors, and in particular antagonizing the actions of substance P by blocking the NK1 receptor, the compds. according to the invention are useful as a medicine, in particular in the

prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular depression, anxiety disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, schizoaffective disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular IBS; skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

IT **681290-29-9P 681290-30-2P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; stereoselective preparation of 1,4-dipiperidin-4-ylpiperazines with tachykinin antagonist activity)

IT **681290-31-3P 681290-32-4P 681290-33-5P**
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681290-37-9P 681290-40-4P 681290-41-5P
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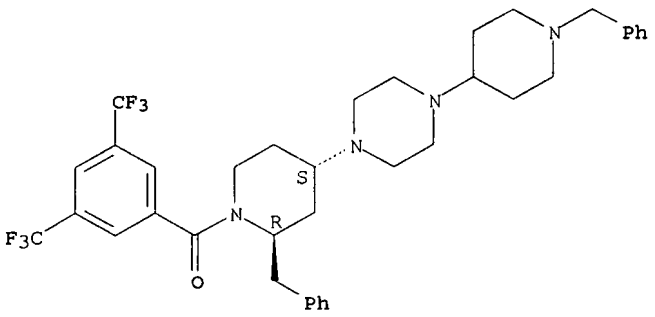
717137-65-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; stereoselective preparation of 1,4-dipiperidin-4-ylpiperazines with tachykinin antagonist activity)

IT **681291-93-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; stereoselective preparation of 1,4-dipiperidin-4-ylpiperazines with tachykinin antagonist activity)

IT **681290-29-9P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; stereoselective preparation of 1,4-dipiperidin-4-ylpiperazines with tachykinin antagonist activity)

RN 681290-29-9 HCAPLUS
CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-4-piperidinyl]-1-piperazinyl]-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:333696 HCAPLUS
DN 140:357378

TI Preparation of 1,4-di(piperidin-4-yl)piperazine derivatives as neurokinin antagonists

IN **Janssens, Frans Eduard; Sommen, Francois Maria;** De Boeck, Benoit Christian Albert Ghislain; **Leenaerts, Joseph Elisabeth; Van Roosbroeck, Yves Emiel Maria; Diels, Gaston Stanislas Marcella**

PA **Janssen** Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 93 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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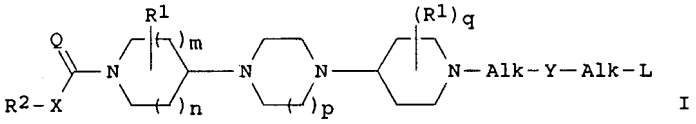
OS MARPAT 140:357378

GI



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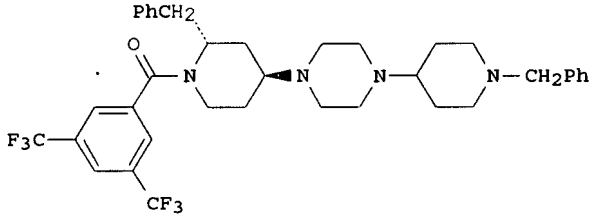

II

AB Title compds. I [wherein Q = O, amino; X = a covalent bond, O, S, amino; R1 = independently (un)substituted Ph, phenylalkyl, diphenylalkyl; Alk = independently a covalent bond, (un)substituted hydrocarbon radical; Y = a covalent bond, CO, SO2; L = H, alkyloxy, carbonyl, (di)alkylamino, phenylcarbonyl, etc.; n = 0-2, m = 1-2; p = 1-2; q = 0-1; and pharmaceutically acceptable acid or base addition salts thereof, the stereochem. isomeric forms thereof, the N-oxide form thereof and prodrugs thereof] were prepared as neurokinin (NK) antagonists. For example, reductive N-alkylation of (2R,4S)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl)piperidine with 1-(phenylmethyl)-4-piperidinone gave II. The prepared title compds. showed (sub)nanomolar affinity for the human-NK1 receptor, most of them with more than 100-fold selectivity towards the h-NK2 and h-NK3 receptors. Thus, I and their pharmaceutical compns. are useful for the treatment of neurokinin-mediated conditions, such as emesis, anxiety, depression, pain, pancreatitis and IBS (no data).

IT **681290-29-9P 681290-30-2P 681290-57-3P**
681291-02-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

IT **681290-31-3P 681290-32-4P 681290-33-5P**
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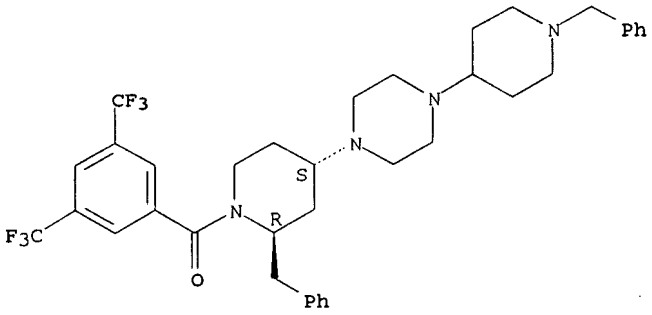
681291-86-1P 681291-87-2P 681291-88-3P
681291-89-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

IT **681291-93-0P 681291-95-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

IT **681290-29-9P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

RN 681290-29-9 HCAPLUS
CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-4-piperidinyl]-1-piperazinyl]-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l23 tot

L23 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:1124611 HCAPLUS
DN 142:74608
TI A preparation of 1,4-di-(piperidin-4-yl)piperazine derivatives, useful as NK1 antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian Albert Ghislain; Leenaerts, Joseph Elisabeth; Van Roosbroeck, Yves Emiel Maria; Meert, Theo Frans
PA Janssen Pharmaceutica N. V., Belg.
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO2004110415	A2	20041223	2004WO-EP51048	20040607
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,

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	MX2005PA13295	A	20060309	2005MX-PA13295	20051207
	US2006128721	A1	20060615	2005US-0560476	20051212
PRAI	WO 2003-EP350220	A	20030610		
	2004WO-EP51048	W	20040607		

OS MARPAT 142:74608

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

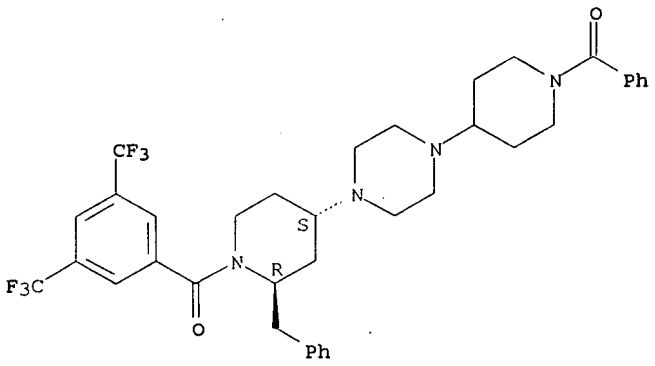
AB The invention relates to a preparation of 1,4-di-(piperidin-4-yl)-piperazine derivs. of formula I [wherein: Q is O, NH, or N-alkyl; X is (CH2)0-2; Y is (CH2)1-2; Z is (CH2)1-2; E is a bond or O, S, NH, N-alkyl; each A represents independently from each other, a bond or (un)substituted (cyclo)alkyl; D is a bond, C(O), or SO2; L is H, alkoxy, aryloxy, alkylamino, or heterocyclyl-carbonyl, etc.; each R1, independently from each other, is selected from aryl, arylalkyl, or diarylalkyl; R2 is alkyl, aryl, arylalkyl, or heterocyclylalkyl, etc.], useful as NK1 receptor antagonists. The pharmaceutical composition according to the invention reduces to a large extent a number of unwanted side-effects associated with opioid analgesics, in particular emesis, respiratory depression and tolerance, thereby increasing the total tolerability of said opioids in pain treatment. For instance, 1,4-di-(piperidin-4-yl)piperazinecarboxothiophene derivative II (h-NK1, pIC50 = 10; h-NK2, pIC50 = 6.1; h-NK3, pIC50 = 6.3) was prepared via amidation of 3-thiophenecarboxylic acid by 1,4-di-(piperidin-4-yl)piperazine derivative III with a yield of 58%.

IT **681290-31-3P 681291-44-1P 681291-45-2P 681291-46-3P 815579-75-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

RN 681290-31-3 HCAPLUS

CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4S)- (9CI) (CA INDEX NAME)

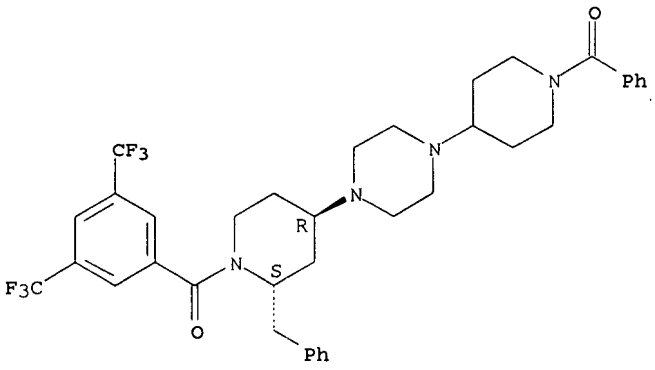
Absolute stereochemistry.



RN 681291-44-1 HCAPLUS

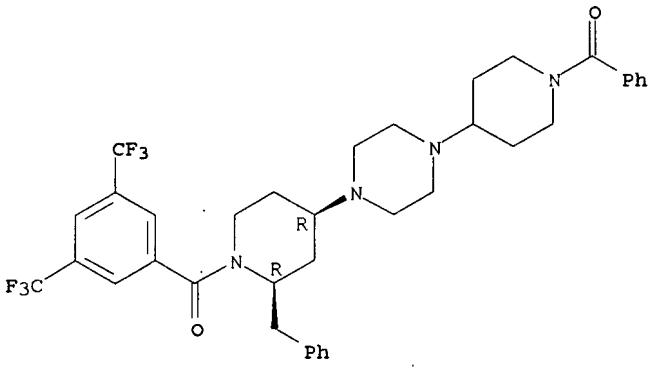
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



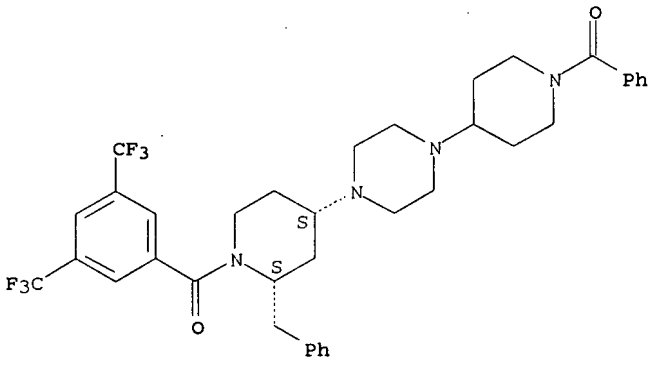
RN 681291-45-2 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

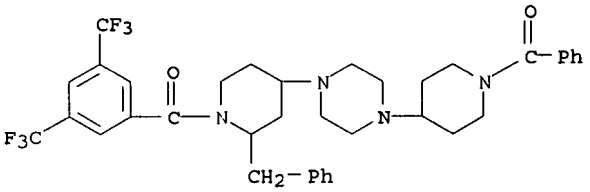


RN 681291-46-3 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 815579-75-0 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



L23 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:550876 HCAPLUS
DN 141:106495
TI Substituted 1-piperidin-3-yl-4-piperidin-4-yl-piperazine derivatives and their use as neurokinin antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian Albert Ghislain; Leenaerts, Joseph Elisabeth
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO2004056364	A1	20040708	2003WO-EP51035	20031217
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	EP---1578425	A1	20050928	2003EP-0813610	20031217
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	CN---1728999	A	20060201	CN 2003-80107008	20031217
	JP2006512348	T	20060413	2004JP-0561502	20031217
	IN2005DN02711	A	20070105	2005IN-DN02711	20050620
	US2006252747	A1	20061109	2005US-0540045	20050622
	MX2005PA06888	A	20050816	2005MX-PA06888	20050623
	NO2005003598	A	20050920	2005NO-0003598	20050722
PRAI	2002WO-EP14835	A	20021223		
	2003EP-0813610	A	20031217		
	2003WO-EP51035	W	20031217		

OS MARPAT 141:106495
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = Ar2, Ar2-alkyl, di(Ar2)-alkyl Het1, Het1-alkyl; R3 independently = H or alkyl; Y = covalent bond, -CO-, -SO2-, >C:CHR or >C:NR, wherein R = H, CN or NO2; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from pyrrolyl, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p =

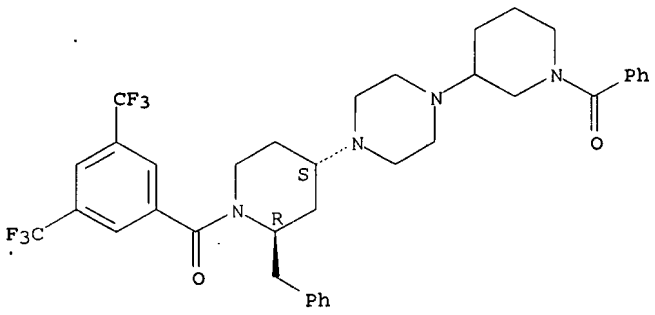
1-2; q = 0-1] and their pharmaceutically acceptable salts having neurokinin antagonistic activity, in particular NK1 antagonistic activity, a combined NK1/NK3 antagonistic activity and a combined NK1/NK2/NK3 antagonistic activity, their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of schizophrenia, emesis, anxiety and depression, irritable bowel syndrome (IBS), circadian rhythm disturbances, visceral pain, neurogenic inflammation, asthma, micturition disorders such as urinary incontinence and nociception are disclosed. Thus, e.g., II was prepared via reaction of (2R-trans)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl)piperidine (preparation given) with 1-(phenylmethyl)-3-piperidinone. The receptor binding values (pIC50) for the h-NK1 ranges for all compds. according to the invention between 10 and 6. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P, Neurokinin A and Neurokinin B by blocking the NK1, NK2 and NK3 receptors, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular schizoaffective disorders, depression, anxiety disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

IT **720713-96-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)

RN 720713-96-2 HCAPLUS

CN Piperidine, 4-[4-(1-benzoyl-3-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:546478 HCAPLUS
DN 141:89116
TI Preparation of substituted 1,4-di-piperidin-4-yl-piperazine derivatives and their use as tachykinin antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian Albert Ghislain; Leenaerts, Joseph Elisabeth; Van Roosbroeck, Yves Emiel Maria
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO2004056772	A1	20040708	2002WO-EP14836	20021223
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	AU2002368487	A1	20040714	2002AU-0368487	20021223
	CA---2499903	A1	20040422	2003CA-2499903	20031007
	WO2004033428	A1	20040422	2003WO-EP50697	20031007
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	AU2003282115	A1	20040504	2003AU-0282115	20031007
	EP---1551804	A1	20050713	2003EP-0773731	20031007
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	BR2003015098	A	20050816	2003BR-0015098	20031007
	CN---1703400	A	20051130	CN 2003-80101027	20031007
	JP2006510602	T	20060330	2004JP-0542503	20031007
	NZ----539848	A	20060630	2003NZ-0539848	20031007
	US2006167008	A1	20060727	2005US-0527821	20050315
	MX2005PA03778	A	20050608	2005MX-PA03778	20050408
	NO2005002192	A	20050504	2005NO-0002192	20050504
PRAI	2002WO-EP11328	A	20021008		
	2002WO-EP14836	A	20021223		
	2003WO-EP50697	W	20031007		
OS	MARPAT 141:89116				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Tile compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = alkyl, Ar2, Ar2-alkyl, Het1, Het1-alkyl; R3 independently = H or alkyl; Y = covalent bond, CO, SO2; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from pyrrolyl, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts are disclosed as having tachykinin antagonistic activity, in particular NK1 antagonistic activity. Their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of emesis, anxiety, depression and irritable bowel syndrome (IBS) are disclosed. Thus, II was prepared via resolution of III (preparation given), de-N-benzylation, and reaction with 1-(phenylmethyl)-4-piperidinone. Selected compds. of the invention were evaluated for binding to h-NK1, h-NK2, and h-NK3 receptors with all compds. showing (sub)nanomolar affinity for h-NK1 with most possessing more than 100-fold selectivity towards the h-NK2 and h-NK3 receptors. In view of their capability to antagonize the actions of tachykinins by blocking the tachykinin receptors, and in particular antagonizing the actions of substance P by blocking the NK1 receptor, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular depression, anxiety

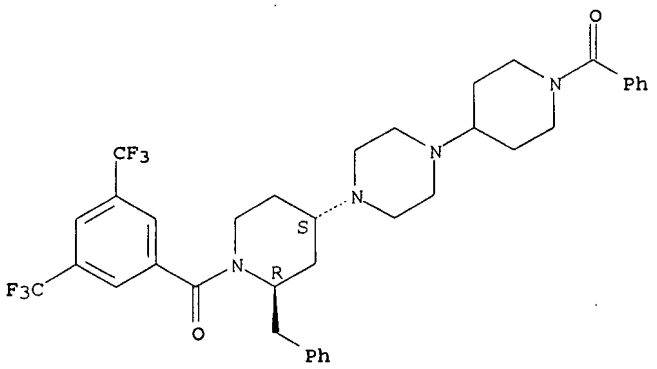
disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, schizoaffective disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular IBS; skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

IT **681290-31-3P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; stereoselective preparation of 1,4-dipiperidin-4-ylpiperazines with tachykinin antagonist activity)

RN 681290-31-3 HCAPLUS

CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:333696 HCAPLUS
DN 140:357378
TI Preparation of 1,4-di(piperidin-4-yl)piperazine derivatives as neurokinin antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian Albert Ghislain; Leenaerts, Joseph Elisabeth; Van Roosbroeck, Yves Emiel Maria; Diels, Gaston Stanislas Marcella
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO2004033428	A1	20040422	2003WO-EP50697	20031007
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CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA---2499903	A1	20040422	2003CA-2499903	20031007
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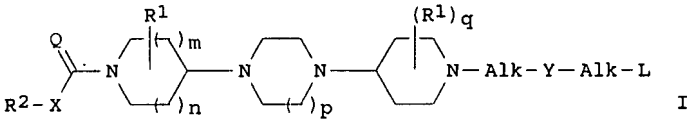
2003WO-EP50697	W	20031007		

OS MARPAT 140:357378
GI



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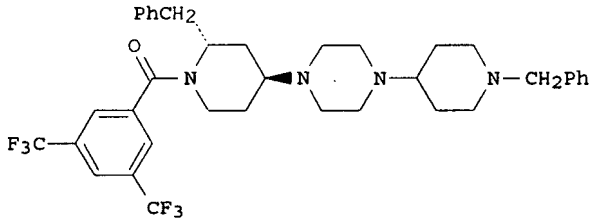


II

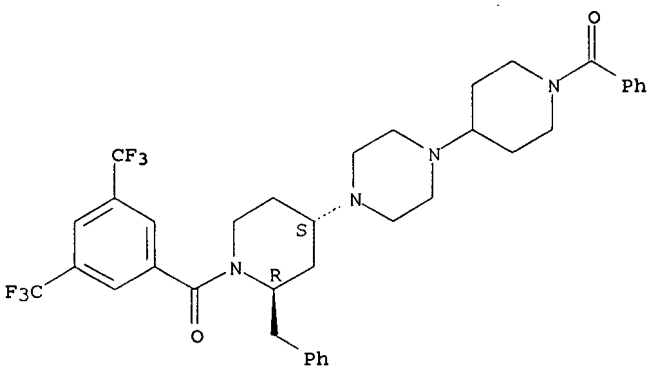
AB Title compds. I [wherein Q = O, amino; X = a covalent bond, O, S, amino; R1 = independently (un)substituted Ph, phenylalkyl, diphenylalkyl; Alk = independently a covalent bond, (un)substituted hydrocarbon radical; Y = a covalent bond, CO, SO2; L = H, alkyloxy, carbonyl, (di)alkylamino, phenylcarbonyl, etc.; n = 0-2, m = 1-2; p = 1-2; q = 0-1; and pharmaceutically acceptable acid or base addition salts thereof, the stereochem. isomeric forms thereof, the N-oxide form thereof and prodrugs thereof] were prepared as neurokinin (NK) antagonists. For example, reductive N-alkylation of (2R,4S)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl)piperidine with 1-(phenylmethyl)-4-piperidinone gave II. The prepared title compds. showed (sub)nanomolar affinity for the human-NK1 receptor, most of them with more than 100-fold selectivity towards the h-NK2 and h-NK3 receptors. Thus, I and their pharmaceutical compns. are useful for the treatment of neurokinin-mediated conditions, such as emesis, anxiety, depression, pain, pancreatitis and IBS (no data).

IT **681290-31-3P 681291-44-1P 681291-45-2P**
681291-46-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

RN 681290-31-3 HCAPLUS

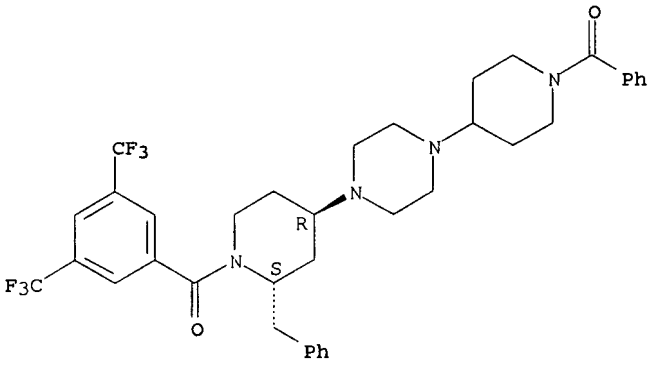
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



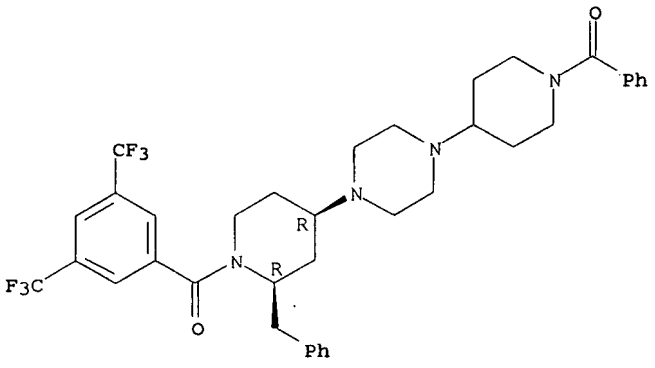
RN 681291-44-1 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



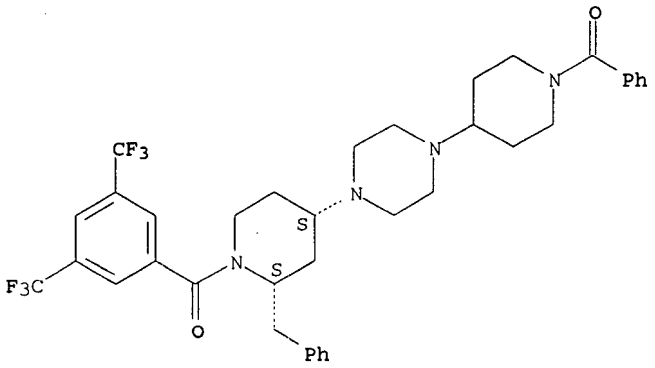
RN 681291-45-2 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 681291-46-3 HCAPLUS
CN Piperidine, 4-[4-(1-benzoyl-4-piperidinyl)-1-piperazinyl]-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-, (2S,4S)- (9CI) (CA INDEX NAME)

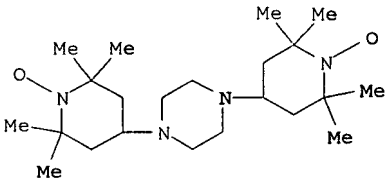
Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr l25 tot

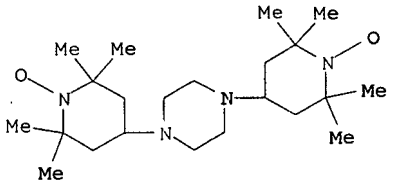
L25 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:721257 HCAPLUS
DN 132:101672
TI Preparation and properties of biradicals and related CT complexes based on 4-substituted-amino-TEMPO radical
AU Nakatsuji, Shin'ichi; Mizumoto, Masako; Takai, Atsushi; Anzai, Hiroyuki; Teki, Yoshio; Tajima, Kunihiko
CS Department of Material Science Faculty of Science, Himeji Institute of Technology, Hyogo, 678-1297, Japan
SO Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (**1999**), 334, 205-210
CODEN: MCLCE9; ISSN: 1058-725X
PB Gordon & Breach Science Publishers
DT Journal
LA English
AB Several biradicals consisting of 4-substituted-amino-TEMPO were prepared from 4-oxo-TEMPO with certain diamines as piperazine, ethylenediamine, 1,2-trans- or cis-cyclohexanediamine by reductive amination reaction. CT complexes derived from the biradicals and acceptors was then prepared and their magnetic behavior were studied comparing with the original biradicals. Although the ferromagnetic behavior was observed in the biradical derived piperazine, antiferromagnetic behavior was predominantly observed in other biradicals or CT complexes derived therefrom.
IT **253789-57-0P 253789-60-5P 253789-61-6P**
253789-62-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of biradicals and related CT complexes based on 4-substituted-amino-TEMPO radical)
RN 253789-57-0 HCAPLUS
CN 1-Piperidinyloxy, 4,4'-(1,4-piperazinediyl)bis[2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



RN 253789-60-5 HCAPLUS
CN 1-Piperidinyloxy, 4,4'-(1,4-piperazinediyl)bis[2,2,6,6-tetramethyl-, compd. with 2,2'-(2,3,5,6-tetrafluoro-2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile] (1:1) (9CI) (CA INDEX NAME)

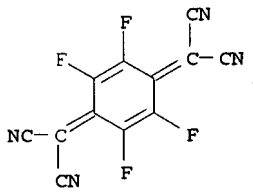
CM 1

CRN 253789-57-0
CMF C22 H42 N4 O2



CM 2

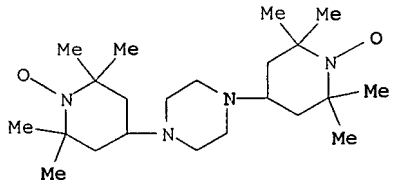
CRN 29261-33-4
CMF C12 F4 N4



RN 253789-61-6 HCAPLUS
CN 1-Piperidinyloxy, 4,4'-(1,4-piperazinediyl)bis[2,2,6,6-tetramethyl-, compd. with 2,2'-(2,3,5,6-tetrafluoro-2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile] (1:2) (9CI) (CA INDEX NAME)

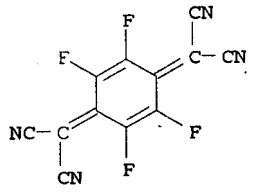
CM 1

CRN 253789-57-0
CMF C22 H42 N4 O2



CM 2

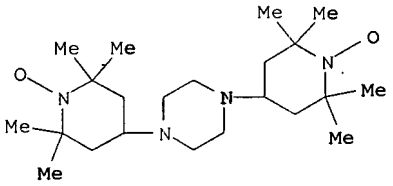
CRN 29261-33-4
CMF C12 F4 N4



RN 253789-62-7 HCAPLUS
CN 1-Piperidinyloxy, 4,4'-(1,4-piperazinediyl)bis[2,2,6,6-tetramethyl-, compd. with 4,5-dichloro-3,6-dioxo-1,4-cyclohexadiene-1,2-dicarbonitrile (1:1) (9CI) (CA INDEX NAME)

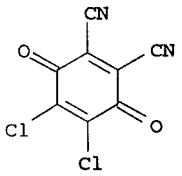
CM 1

CRN 253789-57-0
CMF C22 H42 N4 O2



CM 2

CRN 84-58-2
CMF C8 Cl2 N2 O2

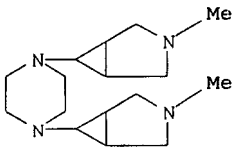


RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:734569 HCAPLUS
DN 124:8748
TI Spatially fixed oligoamines. IV. Flexibility and protonation of meander-type octamines
AU Wagemann, Rolf; Vilsmaier, Elmar; Maas, Gerhard
CS Fachbereich Chem., Univ. Kaiserslautern, Kaiserslautern, D-67663, Germany
SO Tetrahedron (1995), 51(32), 8815-28
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier
DT Journal
LA English
AB Two meander-type octamines, possessing three piperazine units, two bicyclo[3.1.0]hexyl, and two azabicyclo[3.2.0]hexyl systems as building blocks, could be obtained by reductive amination of bis(oxobicyclohexyl)piperazine with piperazinyl-3-azabicyclohexane derivs. The latter were synthesized from an N-benzylchloroenamine and sodium borohydride with subsequent removal of the benzylic protecting group. The conformation and mol. flexibility of the new oligoamines were studied. Di- and tetraammonium species with definite location of the protons were generated from one octamine. X-ray anal. of a diammonium salt was used to give an insight into the mol. arrangement of an (azoniabicyclohexyl)piperazine trifluoromethanesulfonate unit.
IT **171037-06-2P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(flexibility and protonation of meander-type octamines)
RN 171037-06-2 HCAPLUS
CN Methanesulfonic acid, trifluoro-, compd. with (1α,1'α,5α,5'α,6α,6'α)-6,6'-(1,4-piperazinediyl)bis[3-methyl-3-azabicyclo[3.1.0]hexane] (2:1) (9CI) (CA INDEX NAME)

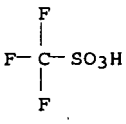
CM 1

CRN 154233-62-2
CMF C16 H28 N4



CM 2

CRN 1493-13-6
CMF C H F3 O3 S

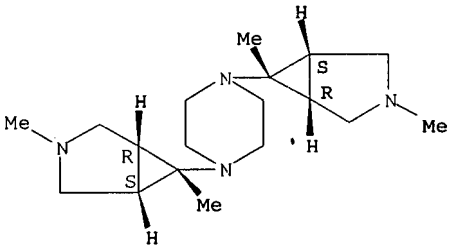


L25 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1994:270313 HCAPLUS
DN 120:270313
TI Functionalized chloroenamines in aminocyclopropane synthesis. XIII. Azaannulated cyclopropanes - rigid building blocks for oligoamines
AU Seibel, Jens; Vilsmaier, Elmar; Froehlich, Karin; Maas, Gerhard; Wagemann, Rolf
CS Fachbereich Chem., Univ. Kaiserslautern, Kaiserslautern, D-67663, Germany
SO Tetrahedron (**1994**), 50(3), 715-30
CODEN: TETRAB; ISSN: 0040-4020
DT Journal
LA English
OS CASREACT 120:270313
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

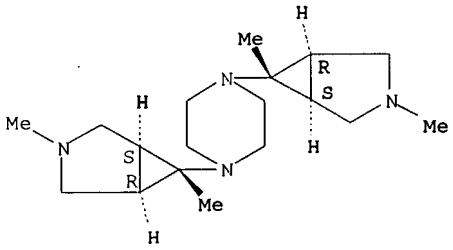
AB Oligoamines I (R1 = H, CH2N2, cyano, Me, R2 = Me, H, CH2Ph), II and III with rigid 3-azabicyclo[3.10]hexyl building blocks were synthesized from di(chloroenamines) IV and nucleophiles. Sodium borohydride as nucleophile led to endo,endo-tetramines I (R1 = H, R2 = Me, CH2Ph); the same stereochem. result generating I (R1 = cyano, R2 = Me; R1 = R2 = Me) was observed for cyanide or methyllithium as reagents. Methylmagnesium bromide reacted with IV to give mainly exo,exo-tetramine III besides small amts. of isomers I (R1 = R2 = Me) (V) and II. Basicity, conformation and mol. flexibility of the new tetramines I - III were studied. X-Ray structural analyses pointed out a meander shape of tetramine V and a linear arrangement of tetramine III.
IT **154233-66-6P 154333-58-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of)
RN 154233-66-6 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis[3,6-dimethyl-, (1α,1'α,5α,5'α,6β,6'β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

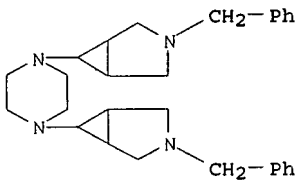


RN 154333-58-1 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis[3,6-dimethyl-, (1α,1'α,5α,5'α,6α,6'α)- (9CI) (CA INDEX NAME)

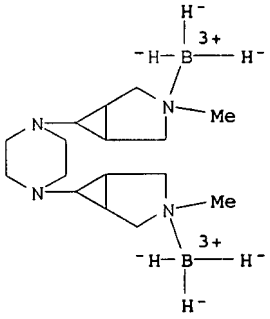
Relative stereochemistry.



IT **154233-61-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
RN 154233-61-1 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis[3-(phenylmethyl)-, (1α,1'α,5α,5'α,6β,6'β)- (9CI) (CA INDEX NAME)

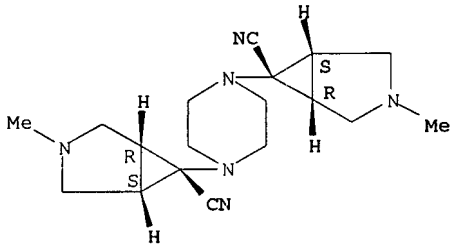


IT **154671-06-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 154671-06-4 HCAPLUS
CN Boron, hexahydro[μ-[6,6'-(1,4-piperazinediyl)bis[3-methyl-3-azabicyclo[3.1.0]hexane-N3:N3']]]di-, stereoisomer (9CI) (CA INDEX NAME)

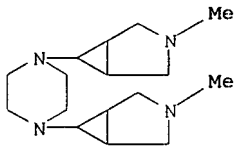


IT **154233-64-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
RN 154233-64-4 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane-6-carbonitrile, 6,6'-(1,4-piperazinediyl)bis[3-methyl-, (1α,1'α,5α,5'α,6β,6'β)- (9CI)
(CA INDEX NAME)

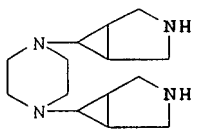
Relative stereochemistry.



IT **154233-62-2P 154233-63-3P 154233-65-5P**
154333-57-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 154233-62-2 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis[3-methyl-, (1α,1'α,5α,5'α,6β,6'β)- (9CI) (CA INDEX NAME)



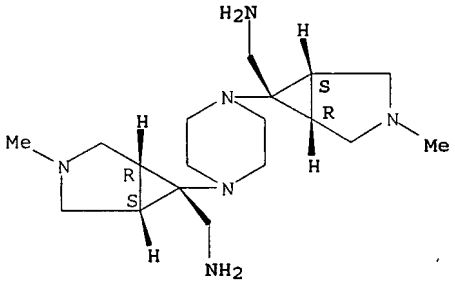
RN 154233-63-3 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis-, (1α,1'α,5α,5'α,6β,6'β)- (9CI) (CA INDEX NAME)



RN 154233-65-5 HCAPLUS

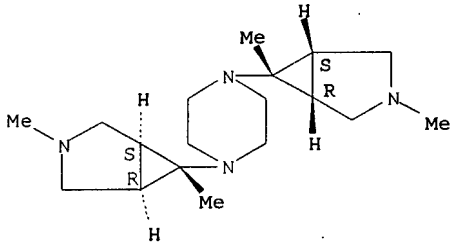
CN 3-Azabicyclo[3.1.0]hexane-6-methanamine, 6,6'-(1,4-piperazinediyl)bis[3-methyl-, (1α,1'α,5α,5'α,6β,6'β)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 154333-57-0 HCAPLUS
CN 3-Azabicyclo[3.1.0]hexane, 6,6'-(1,4-piperazinediyl)bis[3,6-dimethyl-, (1α,1'α,5α,5'α,6α,6'β)- (9CI) (CA INDEX NAME)

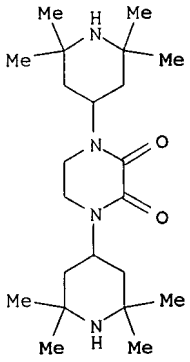
Relative stereochemistry.



L25 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1986:609851 HCAPLUS
DN 105:209851
TI Stabilization of polyphenylene ether resins
CS CIBA-GEIGY A.-G., Basel, 26874, Switz.
SO Research Disclosure (**1986**), 268, 503-5 (No. 26874)
CODEN: RSDSBB; ISSN: 0374-4353
DT Journal; Patent
LA English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RD------268074		19860810		

PRAI 1986RD-000268074 **19860810**
AB The light stability of poly(2,6-dimethylphenol) [25134-01-4] blended with rubber-modified polystyrene [9003-53-6] containing 8% TiO2 was improved by addition of hindered amine light stabilizers and 2-hydroxy-4-octyloxybenzophenone [1843-05-6] UV absorber.
IT **76802-09-0**
RL: USES (Uses)
(light stabilizers, for poly(dimethylphenol) blends with rubber-modified polystyrene)
RN 76802-09-0 HCAPLUS
CN 2,3-Piperazinedione, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



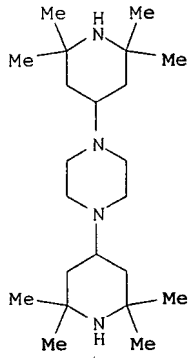
L25 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1981:157850 HCAPLUS
DN 94:157850
TI Piperidine derivatives, and polymer compositions containing them
IN Cantatore, Giuseppe; Cassandrini, Paolo
PA Chimosa Chimica Organica S.p.A., Italy
SO Eur. Pat. Appl., 32 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP-----19578	A1	19801126	1980EP-0810117	19800403 <--
	EP-----19578	B1	19830330		
	R: DE, FR, GB, IT				
	US---4316025	A	19820216	1980US-0139274	19800410 <--
	JP--55147259	A	19801117	1980JP-0049099	19800414 <--
	JP--01022265	B	19890425		
PRAI	1979IT-0021841	A	19790413 <--		

AB N,N'-Di-4-piperidyl derivs. of diazacycloalkanes are stabilizers for polymers, especially polyolefins. Thus, refluxing N, N'-bis(2,2,6,6-tetramethyl-4-piperidyl)ethylenediamine [61260-54-6] 338, BrCH2CH2Br [106-93-4] 206.6, and K2CO3 276.4 g in 2 L PhMe 30 h gives N,N'-bis(2,2,6,6-tetramethyl-4-piperidyl)piperazine (I) [**76802-05-6**]. Polypropylene [9003-07-0] containing I 0.2, BHT 0.1, and Ca stearate 0.1% lost 50% tensile strength in 21,080 h accelerated weathering, compared with 300 h with 2-hydroxy-4-actoxybenzophenone instead of I.

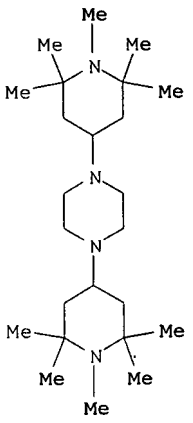
IT **76802-05-6 76802-06-7 76802-07-8**
76802-09-0 76802-10-3 76802-19-2
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(stabilizers, for polymers)

RN 76802-05-6 HCAPLUS
CN Piperazine, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

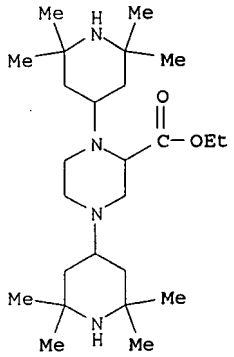


RN 76802-06-7 HCAPLUS

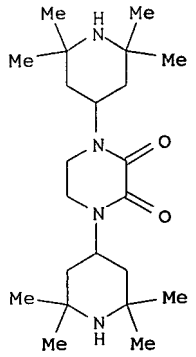
CN Piperazine, 1,4-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



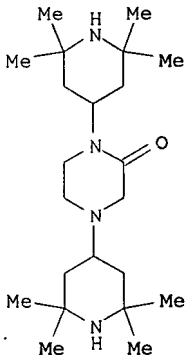
RN 76802-07-8 HCAPLUS
CN 2-Piperazinecarboxylic acid, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, ethyl ester (9CI) (CA INDEX NAME)



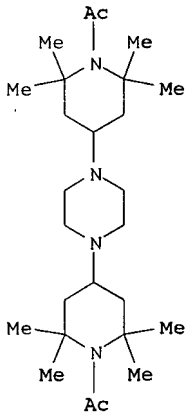
RN 76802-09-0 HCAPLUS
CN 2,3-Piperazinedione, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



RN 76802-10-3 HCAPLUS
CN Piperazinone, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

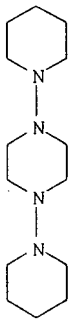


RN 76802-19-2 HCAPLUS
CN Piperidine, 4,4'-(1,4-piperazinediyl)bis[1-acetyl-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



L25 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1962:31334 HCAPLUS
DN 56:31334
OREF 56:5920d-g
TI Electronic interactions of isomeric phenylazopyridines and related N-oxides
AU Pentimalli, Luciano
CS Univ. Bologna, Italy
SO Gazzetta Chimica Italiana (1960), 90, 1203-12
CODEN: GCITA9; ISSN: 0016-5603
DT Journal
LA Unavailable
AB cf. CA 54, 21087a. 2-Phenylazopyridine (I), long orange red needles, m. 31°, 3-PhN:NC5H4N (II), orange scales, m. 50-1°, and 4-PhN:NC5H4N (III), orange pink lamellas, m. 98-9°, were prepared according to Campbell, et al. (CA 48, 3975i). The preparation of the N-oxides of I, II, and III was described earlier (CA 52, 464li; 54, 21087a). A study of the ultra-violet spectra of these compds. dissolved in EtOH, and in HCl of several normalities (N, 0.1N, 0.01N) showed much similarity between I, II, III, and azobenzene, maximum in the ranges 224-9, 312-20, and 440-50 mμ (EtOH); in acid medium, the latter bands shift to 347 and 442 mμ for I, 324 and 440 mμ for II, and 334 and 456 mμ for III. Bands (mμ in EtOH) for the N-oxides (with intensity log ε stated) were: N-oxide of I: 237 (4.11), 273 (4.10), 331 (4.24), and 460; of II, 236 (3.98), 280 (4.14), 318 (4.19), 432 (2.67); of III, 236 (4.02), 356 (4.38), -, 450. In neutral medium, the azo group is electron-attracting and thus acts as a poor conjugation conductor in electronic interactions of Ph or pyridyl with the azo group. In an acid medium, the N-heterocyclic or N-O group is protonized and may cause inversion of the normal direction of the conjugation. Eight spectra are

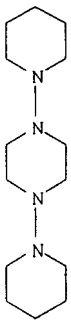
shown and discussed in detail.
IT **92326-81-3P**, Piperazine, 1,4-dipiperidino-
RL: PREP (Preparation)
(preparation of)
RN 92326-81-3 HCAPLUS
CN Piperazine, 1,4-dipiperidino- (6CI, 7CI) (CA INDEX NAME)



L25 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1962:31333 HCAPLUS
DN 56:31333
OREF 56:5920b-d
TI Synthesis of cyclic substituted hydrazines
AU Rink, M.; Mehta, M.; Lux, R.
CS Univ. Bonn, Germany
SO Arch. Pharm. (**1961**), 294, 640-5
DT Journal
LA Unavailable
OS CASREACT 56:31333
AB N-Aminopiperidine (I) (10 g.) (HCl salt m. 157-8°) and 11.2 g. KOH was carefully heated, treated dropwise with 27.6 g. 1,5-dibromopentane (II), and the mixt heated 0.5 g. hr. to give 30% N,N'-bipiperidyl (III), b13 104-5°, n23D 1.4838; methiodide m. 204°; picrate m. 153-4°. III was similarly prepared in 25% yield from N2H4. III in MeOH with Raney Ni 2 days in an autoclave at 150° gave piperidine. Nitrosopyrrolidine was reduced with LiAlH4 in Et2O to 55% N-amino derivative (IV), b13 28-30°; picrate m. 165° (decomposition). I as above with (CH2CH2Br)2 (V) gave 22% N-pyrrolidinopiperidine, b13 92° (picrate m. 132-3°; methiodide m. 161°), similarly prepared in 15% yield from II and IV. IV with KOH and V as above gave 15% N,N'-bipyrrolidinyl, b13 77-8°; picrate m. 165-6° (decomposition). Reduction of dinitrosopiperazine with LiAlH4 in tetrahydrofuran gave 23% 1,4-diamino compound (VI) as di-HCl salt. VI as above with V gave 50% N,N'-dipyrrolidinopiperazine, b0.01 135-8° [dipicrate m. 220° (decomposition)], and with II, 36.4% N,N'-dipiperidinopiperazine, b0.03 97-103°; dipicrate m. 208° (decomposition).
IT **96073-60-8**
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 96073-60-8 HCAPLUS
CN Piperazine, 1,4-dipiperidino-, dipicrate (6CI, 7CI) (CA INDEX NAME)

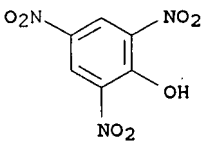
CM 1

CRN 92326-81-3
CMF C14 H28 N4

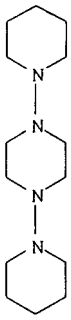


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



IT **92326-81-3P**, Piperazine, 1,4-dipiperidino-
RL: PREP (Preparation)
(preparation of)
RN 92326-81-3 HCAPLUS
CN Piperazine, 1,4-dipiperidino- (6CI, 7CI) (CA INDEX NAME)



L25 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1962:31332 HCAPLUS
DN 56:31332
OREF 56:5919h-i,5920a-b
TI Physiologically active compounds. IV. Synthesis of 6- and 7-halo coumarins by direct condensation procedures
AU Rao, Subba N. V.; Sundaramurthy, V.
CS Univ. Osmania
SO Proceedings - Indian Academy of Sciences, Section A (1961), 54, 105-8
CODEN: PISAA7; ISSN: 0370-0089
DT Journal
LA Unavailable
AB cf. CA 51, 1151d. The condensation of 5 g. m-BrC6H4OH with 5 g. malic acid in 13 ml. concentrated H2SO4 at 120-30° yielded 0.15 g. 7-bromocoumarin, m. 105°. I (5 g.) condensed with 5 g. AcCH2CO2Et in 12 ml. H2SO4 gave 0.5 g. 7-bromo-4-methylcoumarin m. 138°. 4-Chloro-2-hydroxyacetophenone (II) (4 ml.) treated with 8 g. PhCH2CO2Na

(III) and 50 ml. Ac2O at 120° 0.5 and then at 180° 4 hrs., yielded 4 g. 7-chloro-4-methyl-3-phenylcoumarin, m. 140°. Analogously 4-bromo-2-hydroxyacetophenone (IV), 4-iodo-2-hydroxyacetophenone, and 5-bromo-2-hydroxyacetophenone treated with III and Ac2O yielded 7-bromo-4-methyl-3-phenylcoumarin, m. 129°, 6-bromo-4-methyl-3-phenylcoumarin, m. 142°, and 6-bromo-4-methyl-3-phenylcoumarin, m. 189°, resp. II (2 ml.) and 2 g. NCCH2CO2Et (V) refluxed with 0.1 g. NaOEt in 20 ml. absolute EtOH produced 1.4 g. 7-chloro-4-methyl-3-cyanocoumarin, m. 204° (acetone-H2O). Likewise IV and V gave 7-bromo-4-methyl-3-cyanocoumarin, m. 210°. II (1.5 ml.) treated with 10 ml. ethyl carbonate in the presence of 1.5 g. Na powder and heated on a steam bath for 1 hr. 1 g. yielded 7-chloro-4-hydroxycoumarin, m. 242° (EtOAcpetr. ether). Similarly IV gave 7-bromo-4-hydroxycoumarin, m. 243°.

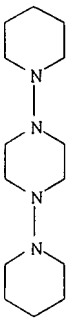
IT **96073-60-8**
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 96073-60-8 HCAPLUS

CN Piperazine, 1,4-dipiperidino-, dipicrate (6CI, 7CI) (CA INDEX NAME)

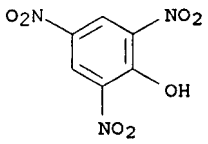
CM 1

CRN 92326-81-3
CMF C14 H28 N4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L25 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1961:76195 HCAPLUS

DN 55:76195

OREF 55:14473a-b

TI Synthesis of some 3-substituted 2-thio-2,4(1H,3H)-quinazolinedione derivatives

AU Trivedi, J. P.

CS St. Xavier's Coll., Ahmedabad

SO J. Indian Chem. Soc. (1960), 37, 801-2

DT Journal

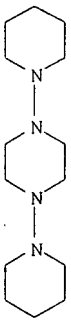
LA Unavailable

AB The following title compds. were prepared: PhCH2 (I), m. 246°; o-ClC6H4CH2, m. 262°; p-ClC6H4CH2, m. 226°; p-BrC6H4CH2, m. 220°; p-IC6H4CH2, m. 268-70°; m-MeC6H4CH2, m. 216°; 2,5-Me2C6H3CH2 (II), m. 259-60°; 2,4-Me2C6H3CH2, m. 235°. A 0.1M absolute EtOH solution of the substituted benzyl isothiocyanate was added to a 0.1M EtOH solution of anthranilic acid, the mixture refluxed 2-3 hrs. (6 hrs.

for II), and the EtOH evaporated until product separated, recrystd. from EtOH (C6H6-EtOH for I). The compds. were prepared as potential ataractic agents.

IT **92326-81-3 96073-60-8**
(Derived from data in the 6th Collective Formula Index (1957-1961))

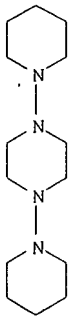
RN 92326-81-3 HCAPLUS
CN Piperazine, 1,4-dipiperidino- (6CI, 7CI) (CA INDEX NAME)



RN 96073-60-8 HCAPLUS
CN Piperazine, 1,4-dipiperidino-, dipicrate (6CI, 7CI) (CA INDEX NAME)

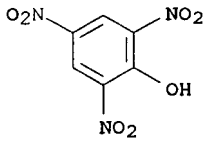
CM 1

CRN 92326-81-3
CMF C14 H28 N4



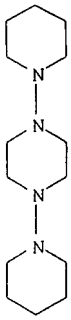
CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



L25 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1961:76194 HCAPLUS
DN 55:76194
OREF 55:14472h-i,14473a
TI Synthesis of cyclically substituted hydrazines
AU Rink, Melanie; Mehta, Mahendrakumar
CS Univ. Bonn, Germany
SO Naturwissenschaften (1961), 48, 51
CODEN: NATWAY; ISSN: 0028-1042

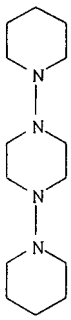
DT Journal
LA Unavailable
AB Nitrosopyrrolidine with LiAlH4 gave 50-5% pyrrolidylhydrazine (I), b13 28-30°; picrate m. 165°. I with 1,4-dibromobutane (II) yielded N,N'-bipyrrolidyl, b13 77-8° (picrate m. 165°), which with Raney Ni gave pyrrolidine (III). I and 1,5-dibromopentane (IV) gave 15% N-piperidinopyrrolidine, viscous oil, b12 91° [picrate m. 132-3° (H2O)], which with PtO2 yielded III and piperidine (V). Dinitrosopiperazine, light-yellow crystals, m. 158° (H2O), obtained from piperazine and HNO2 in nearly quant. yield, with LiAlH4 gave 24% 1,4-diaminopiperazine (VI), isolated as hydrochloride, needles, m. 238° (decomposition). VI and 2 moles IV gave 5% N,N'-dipiperidinopiperazine [dipicrate m. 208° (decomposition)], which on reduction over PtO2 yielded piperrazine and V. VI and II gave 50% crude NN',-dipyrrolidinopiperazine, b0.1 135-8° (decomposition); dipicrate m. 220° (decomposition).
IT **92326-81-3P**, Piperazine, 1,4-dipiperidino- **96073-60-8P**, Piperazine, 1,4-dipiperidino-, dipicrate
RL: PREP (Preparation)
(preparation of)
RN 92326-81-3 HCAPLUS
CN Piperazine, 1,4-dipiperidino- (6CI, 7CI) (CA INDEX NAME)



RN 96073-60-8 HCAPLUS
CN Piperazine, 1,4-dipiperidino-, dipicrate (6CI, 7CI) (CA INDEX NAME)

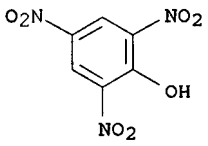
CM 1

CRN 92326-81-3
CMF C14 H28 N4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

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more information.

=> d all l26 tot

L26  ANSWER 1 OF 2  HCAOLD  COPYRIGHT 2007 ACS on STN
AN   CA56:5920b  CAOLD
TI   synthesis of cyclic substituted hydrazines
AU   Rink, Melanie; Mehta, M.; Dohr-Lux, R.
IT    2569-55-3    2569-57-5    2569-58-6    6130-94-5   16596-41-1
     18389-95-2   18735-81-4   18735-82-5   40675-64-7   49840-66-6
     90973-52-7   91565-59-2   92326-81-3   92697-80-8   94374-29-5
     94524-00-2   94602-38-7   95699-49-3   96073-60-8

L26  ANSWER 2 OF 2  HCAOLD  COPYRIGHT 2007 ACS on STN
AN   CA55:14473a  CAOLD
TI   synthesis of some 3-substituted 2-thio-2,4(1H,3H)-quinazolinedione derivs.
AU   Trivedi, J. P.
IT   13906-05-3   35976-99-9   35977-03-8   35977-07-2   35977-09-4
     35977-11-8   36120-41-9   91565-59-2   92326-81-3   95699-49-3
     96073-60-8  100961-25-9


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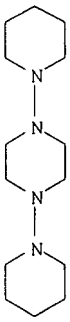
L27 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
RN **96073-60-8** REGISTRY
ED Entered STN: 28 Apr 1985
CN Piperazine, 1,4-dipiperidino-, dipicrate (6CI, 7CI) (CA INDEX NAME)
MF C14 H28 N4 . 2 C6 H3 N3 O7
LC STN Files: CA, CAOLD, CAPLUS

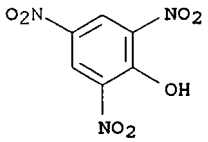
CM 1

CRN 92326-81-3
CMF C14 H28 N4



CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 56:31333

REFERENCE 2: 56:31332

REFERENCE 3: 55:76195

REFERENCE 4: 55:76194

L27 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
RN **92326-81-3** REGISTRY
ED Entered STN: 17 Dec 1984
CN Piperazine, 1,4-dipiperidino- (6CI, 7CI) (CA INDEX NAME)
MF C14 H28 N4
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
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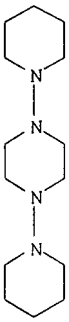

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2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 56:31334

REFERENCE 2: 56:31333

REFERENCE 3: 55:76195

REFERENCE 4: 55:76194

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L28 ANSWER 1 OF 4 USPATFULL on STN
AN 2006:295577 USPATFULL
TI Substitituted 1-piperidin-3-yl-piperidin 4-yl-piperazine derivatives and their use as neurokinin auantagonists
IN Janssens, Frans Eduard, Bonheide, GERMANY, FEDERAL REPUBLIC OF
Sommen, Francois Maria, Beers, BELGIUM
De Boeck, Benoit Christian Albert, Genval, GERMANY, FEDERAL REPUBLIC OF
Leenaerts, Joseph Elisabeth, Beerse, BELGIUM
PI US-20060252747 A1 20061109
AI 2003US-000540045 A1 20031217 (10)
2003WO-EP00051035 20031217
20050622 PCT 371 date
DT Utility
FS APPLICATION
LREP PHILIP S. JOHNSON, JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003, US
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention concerns substituted 1-piperidin-3-yl-4-piperidin-4-yl-piperazine derivatives having neurokinin antagonistic activity, in particular NK.sub.1 antagonistic activity, a combined NK.sub.1/NK.sub.3 antagonistic activity and a combined NK.sub.1/NK.sub.2/NK.sub.3 antagonistic activity, their preparation, compositions comprising them and their use as a medicine, in particular for the treatment of schizophrenia, emesis, anxiety and depression, irritable bowel syndrom (IBS), circadian rhythm disturbances, visceral pain, neurogenic inflammation, asthma, micturition disorders such as urinary incontinence and nociception. The compounds according to the invention can be represented by general Formula (I) and comprises also the pharmaceutically acceptable acid or base addition salts thereof, the

stereochemically isomeric forms thereof, the N-oxide form thereof and prodrugs thereof, wherein all substituents are defined as in Claim 1. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P, Neurokinin A and Neurokinin B by blocking the NK.sub.1, NK.sub.2 and NK.sub.3 receptors, the compounds according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular schizoaffective disorders, depression, anxiety disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 720713-39-3P 720713-40-6P 720713-41-7P
720713-58-6P 720713-60-0P 720713-71-3P
720714-87-4P
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)
IT 720713-42-8P 720713-44-0P 720713-45-1P
720713-46-2P 720713-47-3P 720713-48-4P
720713-49-5P 720713-50-8P 720713-51-9P
720713-52-0P 720713-53-1P 720713-54-2P
720713-55-3P 720713-56-4P 720713-57-5P
720713-59-7P 720713-61-1P 720713-62-2P
720713-63-3P 720713-64-4P 720713-66-6P
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720713-74-6P 720713-75-7P 720713-76-8P
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720714-02-3P 720714-04-5P 720714-06-7P
720714-08-9P 720714-09-0P 720714-10-3P
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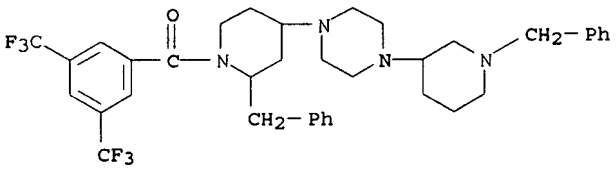
720714-84-1P 720714-85-2P 720714-89-6P
720714-91-0P 720714-93-2P 720714-95-4P
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)
IT 720713-39-3P
(stereoselective preparation of piperidinylpiperidinylpiperazines with tachykinin antagonist activity)
RN 720713-39-3 USPATFULL
CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-3-piperidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



L28 ANSWER 2 OF 4 USPATFULL on STN
AN 2006:196252 USPATFULL
TI Substituted 1,4,-di-piperidin-4-yl-piperazine derivatives and their use as neurokinin antagonists
IN Janssens, Frans Eduard, Bonheide, BELGIUM
Sommen, Francois Maria, Wortel, BELGIUM
De Boeck, Benoit Christian Albert Ghislain, Genval, BELGIUM
Leenaerts, Joseph Elisabeth, Rijkevorsel, BELGIUM
Van Roosbroeck, Yves Emiel Maria, Hallaar, BELGIUM
Diels, Gaston Stanislas Marcella, Ravels, BELGIUM
PI US-20060167008 A1 20060727
AI 2003US-000527821 A1 20031007 (10)
2003WO-EP00050697 20031007
20050315 PCT 371 date
PRAI 2003WO-EP00011328 20021008
2003WO-EP00014836 20021223
DT Utility
FS APPLICATION
LREP PHILIP S. JOHNSON, JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003, US
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2323
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns substituted 1,4-di-piperidin-4-yl-piperazine derivatives having neurokinin antagonistic activity, in particular NK.sub.1 antagonistic activity, their preparation, compositions comprising them and their use as a medicine, in particular for the treatment of emesis, anxiety, depression, pain, pancreatitis and IBS. The compounds according to the invention can be represented by general Formula (I) ##STR1## and comprises also the pharmaceutically acceptable acid or base addition salts thereof, the stereochemically isomeric forms thereof, the N-oxide form thereof and prodrugs thereof, wherein all substituents are defined as in claim 1.

In view of their capability to antagonize the actions of neurokinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P by blocking the NK.sub.1 receptor, the compounds according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of neurokinin-mediated conditions, such as, for instance CNS disorders, in particular depression, anxiety disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, schizoaffective disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; emesis; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **681290-29-9P 681290-30-2P 681290-57-3P**
681291-02-1P
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)
IT **681290-31-3P 681290-32-4P 681290-33-5P**
681290-34-6P 681290-35-7P 681290-36-8P
681290-37-9P 681290-38-0P 681290-39-1P
681290-40-4P 681290-41-5P 681290-42-6P
681290-43-7P 681290-44-8P 681290-45-9P
681290-46-0P 681290-47-1P 681290-48-2P

681290-49-3P 681290-50-6P 681290-51-7P
681290-52-8P 681290-53-9P 681290-54-0P
681290-55-1P 681290-56-2P 681290-58-4P
681290-59-5P 681290-60-8P 681290-61-9P
681290-62-0P 681290-63-1P 681290-64-2P
681290-65-3P 681290-66-4P 681290-67-5P
681290-68-6P 681290-69-7P 681290-70-0P
681290-71-1P 681290-72-2P 681290-73-3P
681290-74-4P 681290-75-5P 681290-76-6P
681290-77-7P 681290-78-8P 681290-79-9P
681290-80-2P 681290-81-3P 681290-82-4P
681290-83-5P 681290-84-6P 681290-85-7P
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681291-41-8P 681291-42-9P 681291-43-0P
681291-44-1P 681291-45-2P 681291-46-3P
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681291-80-5P 681291-81-6P 681291-82-7P
681291-83-8P 681291-84-9P 681291-85-0P
681291-86-1P 681291-87-2P 681291-88-3P
681291-89-4P
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

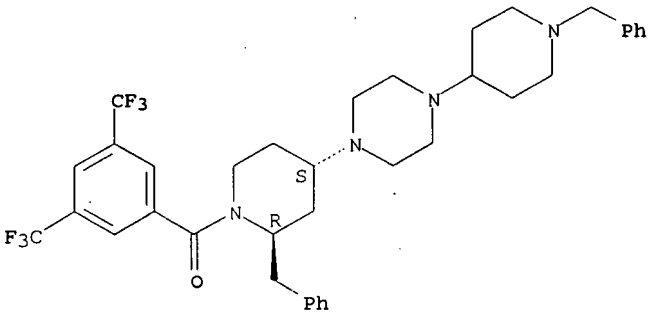
IT **681291-93-0P 681291-95-2P**
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

IT **681290-29-9P**
(preparation of 1,4-di(piperidin-4-yl)piperazine derivs. as neurokinin antagonists)

RN 681290-29-9 USPATFULL

CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-4-piperidinyl]-1-piperazinyl]-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L28 ANSWER 3 OF 4 USPATFULL on STN
AN 2006:152280 USPATFULL
TI Novel formulations of opioid-based treatments of pain comprising substituted 1,4-di-piperidin-4-yl-piperazine derivatives
IN Janssens, Frans Eduard, Beerse, BELGIUM
Sommen, Francois Maria, Beerse, BELGIUM
De Boeck, Benoit Christian Albert Ghislain, Beerse, BELGIUM
Leenaerts, Joseph Elisabeth, Beerse, BELGIUM
Van Roosbroeck, Yves Emiel, Maria, Beerse, BELGIUM
Meert, Theo Frans, Beerse, BELGIUM
PI US-20060128721 A1 20060615
AI 2004US-000560476 A1 20040607 (10)
2004WO-EP00051048 20040607
20051212 PCT 371 date
PRAI 2003WO-EP00050220 20030610
DT Utility
FS APPLICATION
LREP PHILIP S. JOHNSON, JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003, US
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2121
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention concerns novel formulations for opioid-based treatments of pain and/or nociception comprising opioid analgesics and 1,4-di-piperidin-4-yl-piperazine derivatives having neurokinin antagonistic activity, in particular NK.sub.1 antagonistic activity, the use of said formulation for the manufacture of a medicament for the prevention and/or treatment of emesis, pain and/or nociception, in particular in opioid-based acute and chronic pain treatments, more in particular in inflammatory, post-operative, emergency room (ER), breakthrough, neuropathic and cancer pain treatments and the use of an NK.sub.1-receptor antagonist for the manufacture of a medicament for the prevention and/or treatment of respiratory depression in opioid-based treatments of pain.

The pharmaceutical formulations according to the invention comprise a pharmaceutically acceptable carrier and, as active ingredients, a therapeutically effective amount of an opioid analgesic and NK.sub.1-antagonists according to the general Formula (I) ##STR1## the pharmaceutically acceptable acid or base addition salts thereof, the stereochemically isomeric forms thereof, the N-oxide form thereof and prodrugs thereof, wherein all substituents are defined as in claim 1. The pharmaceutical composition according to the invention reduces to a large extent a number of unwanted side-effects associated with opioid analgesics, in particular emesis, respiratory depression and tolerance, thereby increasing the total tolerability of said opioids in pain treatment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **681290-29-9P 681290-30-2P 681290-57-3P**
681291-02-1P
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)
IT **681290-31-3P 681290-32-4P 681290-33-5P**

681290-34-6P 681290-35-7P 681290-36-8P
681290-37-9P 681290-38-0P 681290-39-1P
681290-40-4P 681290-41-5P 681290-42-6P
681290-43-7P 681290-44-8P 681290-45-9P
681290-46-0P 681290-47-1P 681290-48-2P
681290-49-3P 681290-50-6P 681290-51-7P
681290-52-8P 681290-53-9P 681290-54-0P
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681290-77-7P 681290-78-8P 681290-79-9P
681290-80-2P 681290-81-3P 681290-82-4P
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681291-83-8P 681291-84-9P 681291-85-0P
681291-86-1P 681291-87-2P 681291-88-3P
681291-89-4P 815579-75-0P 815579-76-1P
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

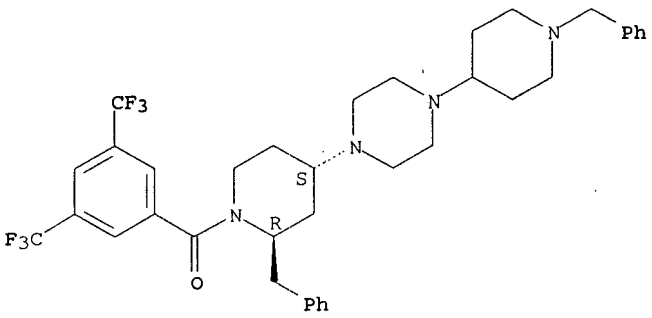
IT 681291-93-0P 681291-95-2P
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

IT 681290-29-9P
(preparation of di(piperidin-4-yl)piperazine derivs. useful as NK1 antagonists)

RN 681290-29-9 USPATFULL

CN Piperidine, 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-[4-[1-(phenylmethyl)-4-piperidinyl]-1-piperazinyl]-, (2R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

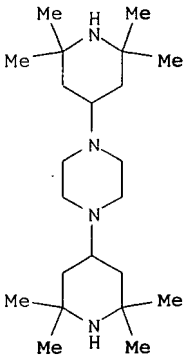


=> d bib abs hitstr l28 4

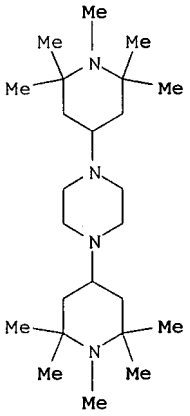
L28 ANSWER 4 OF 4 USPATFULL on STN
AN 82:8052 USPATFULL
TI Piperidine compounds
IN Cantatore, Giuseppe, Casalecchio di Reno, Italy
Cassandrini, Paolo, Bologna, Italy
PA Chimosa Chimica Organica S.p.A., Bologna, Italy (non-U.S. corporation)
PI US-----4316025 19820216
AI 1980US-000139274 19800410 (6)
PRAI 1979IT-0000021841 19790413
DT Utility
FS Granted
EXNAM Primary Examiner: Bond, Robert T.
LREP Wenderoth, Lind & Ponack
CLMN Number of Claims: 6
ECL Exemplary Claim: 1,6
DRWN No Drawings
LN.CNT 641
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds of the formula ##STR1## in which R.sub.1 is hydrogen, --O, --CN, a linear or branched alkyl radical containing from 1 to 20 carbon atoms, an alkenyl or alkynyl radical containing from 2 to 20 carbon atoms, benzyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals or hydroxybenzyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals; or R.sub.1 is a --COR.sub.14, --COOR.sub.14, --CH.sub.2 COOR.sub.14 or --CONR.sub.14 R.sub.15 radical, in which R.sub.14 and R.sub.15, which may be identical or different, are linear or branched C.sub.1 -C.sub.20 -alkyl, C.sub.2 -C.sub.20 -alkenyl, C.sub.5 -C.sub.12 -cycloalkyl, phenyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.8 -alkyl radicals, hydroxyphenyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals, C.sub.7 -C.sub.12 -aralkyl, 2,2,6,6-tetramethyl-4-piperidyl, 1,2,2,6,6-pentamethyl-4-piperidyl or, when they are bonded to N, can be hydrogen or, conjointly with the N to which they are bonded, can form a nitrogen-containing heterocyclic ring with 5-7 members; or R.sub.1 is a ##STR2## radical, in which R.sub.16 is hydrogen or methyl and R.sub.17 is --OH, --OR.sub.14, --OCOR.sub.14 or --OCONR.sub.14 R.sub.15, in which R.sub.14 and R.sub.15 are as defined above; or R.sub.1 is a ##STR3## radical; R.sub.2, R.sub.3, R.sub.6 and R.sub.7, which may be identical or different, are an alkyl radical containing 1 to 6 carbon atoms; R.sub.4 and R.sub.5, which may be identical or different, are hydrogen or an alkyl radical containing from 1 to 6 carbon atoms; R.sub.8, R.sub.9, R.sub.10, R.sub.11, R.sub.12 and R.sub.13, which may be identical or different, are hydrogen or an alkyl radical containing 1 to 6 carbon atoms; m and n are zero or 1; X and Z, which may be identical or different, are ##STR4## in which R.sub.18 is hydrogen or C.sub.1 -C.sub.20 -alkyl and R.sub.19 is hydrogen, C.sub.1 -C.sub.20 -alkyl or a --(CH.sub.2).sub.r --COOR.sub.14 radical, or a --CONR.sub.14 R.sub.15 radical in which R.sub.14 and R.sub.15 are as defined above and r is an integer from 0 to 10; Y is ##STR5## in which R.sub.20 is hydrogen or C.sub.1 -C.sub.20 -alkyl and R.sub.21 is hydrogen, C.sub.1 -C.sub.20 -alkyl, benzyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals, hydroxybenzyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl

radicals, 2,2,6,6-tetramethyl-4-piperidyl, 1,2,2,6,6-pentamethyl-4-piperidyl or a --OH, --NO.sub.2, --NR.sub.22 R.sub.23 or --NH--COR.sub.24 radical, in which R.sub.22 and R.sub.23, which may be identical or different, are hydrogen, C.sub.1 -C.sub.20 -alkyl, benzyl or hydroxybenzyl substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals and R.sub.24 is C.sub.1 -C.sub.20 -alkyl, phenyl which is unsubstituted or substituted by 1 to 3 C.sub.1 -C.sub.8 -alkyl radicals or hydroxyphenyl which is substituted by 1 to 3 C.sub.1 -C.sub.4 -alkyl radicals, are useful as stabilizers for synthetic polymers.

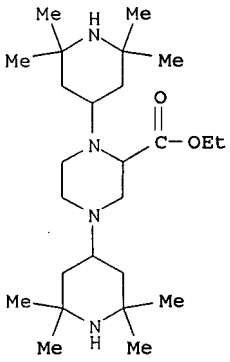
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **76802-05-6 76802-06-7 76802-07-8**
76802-09-0 76802-10-3 76802-19-2
(stabilizers, for polymers)
RN 76802-05-6 USPATFULL
CN Piperazine, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



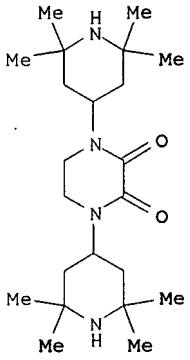
RN 76802-06-7 USPATFULL
CN Piperazine, 1,4-bis(1,2,2,6,6-pentamethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



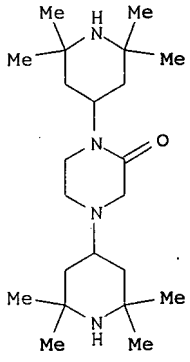
RN 76802-07-8 USPATFULL
CN 2-Piperazinecarboxylic acid, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)-, ethyl ester (9CI) (CA INDEX NAME)



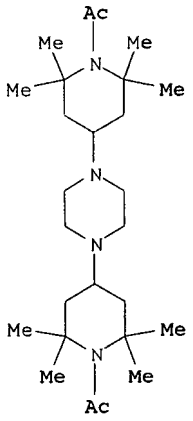
RN 76802-09-0 USPATFULL
CN 2,3-Piperazinedione, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



RN 76802-10-3 USPATFULL
CN Piperazinone, 1,4-bis(2,2,6,6-tetramethyl-4-piperidinyl)- (9CI) (CA INDEX NAME)



RN 76802-19-2 USPATFULL
CN Piperidine, 4,4'-(1,4-piperazinediyl)bis[1-acetyl-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)



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L4           171 L3 AND NC2NC2/ES AND >=2 NC5/ES
L5               STR
L6            15 L5
L7           314 L5 FULL
               SAV TEM J821C1/A L7

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L9             2 L1 AND L8
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                 E JANSSENS F/AU
L10           84 E3-4,E7-9
                 E SOMMEN F/AU
L11           28 E3-6
                 E DE BOECK B/AU
L12           16 E3-4
                 E DEBOECK B/AU
L13            5 E4
                 E LEENAERTS J/AU
L14           27 E4-6
                 E VAN ROOSBROECK Y/AU
L15           10 E4-6
                 E VANROOSBROECK Y/AU
                 E DIELS G/AU
L16           34 E3-8
L17         3311 JANSSEN/CS,PA
L18            5 L8 AND L9-17
L19           10 L8 NOT L18

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                SEL HIT RN

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L27           2 E1-2

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L28           4 L7

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